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APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,672	04/	13/2001	Robert W. Pries	056267-0003	5622
7	590	06/10/2004		EXAMINER	
William K. B			FRIEDMAN, CARL D		
Godfrey & Kahn, S.C. 780 North Water Street			ART UNIT	PAPER NUMBER	
Milwaukee, WI 53202				3635	
				DATE MAILED: 06/10/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
	Office Action Commence	09/834,672	PRIES, ROBERT W.					
	Office Action Summary	Examiner	Art Unit					
		Kevin McDermott	3635					
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
THE - Exte after - If the - If NC - Failu - Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nations of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from Cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication.					
1)	Responsive to communication(s) filed on							
2a)⊠	This action is FINAL . 2b) This	s action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims								
4)⊠	Claim(s) 43-68 is/are pending in the application	n.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
6)⊠	Claim(s) 43-58 is/are rejected.							
7)⊠	Claim(s) 59-68 is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement. Application Papers								
9)[The specification is objected to by the Examiner	•						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) 🔲 🗆	11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
_	If approved, corrected drawings are required in reply to this Office action.							
12)	12)☐ The oath or declaration is objected to by the Examiner.							
Priority u	nder 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 								
Attachment			· · · · · · · · · · · · · · · · · · ·					
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal Pa	(PTO-413) Paper No(s) atent Application (PTO-152)					

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DETAILED ACTION

Claim Objections

Claims 44 and 64 are objected to because of the following informalities:

Regarding claim 44, line 2, it appears that "of" should be corrected to "have".

Regarding claim 64, line 4, the claim should end with a period.

Appropriate correction is required.

Claim Objections

Claim 44 is objected to because of the following informalities:

Line 2 recites "of". It appears that "of" should be corrected to "have".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43, 48, 49, 51-54, 62, and 63, and all claims depending therefrom by virtue of their dependence, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 43, line 10 recites "may be" joined. Are they joined or not? This is indefinite.

Regarding claim 48, line 1 recites "the complex structures". Because of the 112 issues associated with claim 43, the complex structures are not positively claimed in

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claim 43. Consequently, "the complex structures" as recited on claim 48 lacks antecedent basis.

Regarding claim 49, line 2 recites "may be" assembled. Are they assembled or not? This language is considered indefinite. Line 2 also recites "indeterminate". This is indefinite.

Regarding claim 50, line 1 recites "the complex structures". There is insufficient antecedent basis for this limitation in the claims.

Regarding claim 51, line 1 recites "may be". This language is considered indefinite. Line 3 recites "indeterminate". How many combinations are there? This language is indefinite/indeterminate.

Regarding claim 52, line 4 recites "may be". This language is considered indefinite.

Regarding claim 54, it appears to be physically impossible. How can corners simultaneously converge from at least 290 different angles?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 43, as best understood, and claims 46-52 and 55-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Fay.

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Fay discloses an inventory of plates 10. The plates 10 are panel shapes and they are shown in figures 1-9. Fay also discloses knuckles 11, for connecting the panels together. The knuckles 11 and pins 12 connect the panels about an axis centered between the panels. Fay discloses in column 1, lines 28-31 and in figure 10, combining the panels 10 to form a variety of designs and figures. These designs and figures include regular and complex polyhedra. Figures 1-7 show symmetrical panels 10 wherein all sides have an equal length or wherein all pairs of parallel sides are of equal length. Figures 1-7 also show the panels 10 in a plurality of sizes and proportions. Designs and figures include simple polygons and any angle through 360 degrees about any axis between vertices and at a dihedral angle with respect to each other.

Regarding claims 57 and 58, Fay discloses knuckles 11 located at plate 10 corners and along the plate 10 sides. The knuckles 11 along the plate 10 sides as constituting one joinery system, and the knuckles 11 located at the plate 10 corners as constituting a second joinery system. Fay discloses knuckles 11 between plates 10. Knuckles 11 are brackets bridging the space between plates 10. Additionally, the knuckles 11 are elements bridging the space between plates 10, and having a flat portion adjacent the plate 10. The knuckles 11 constitute the element of claim 15 bridging the space between the plates 10. The brackets have an arcuate shape designed for accommodating the pins 12, which pins hold the plates 10 in assembled relation. Pin 12 is a tubular element.

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Regarding claims 55 and 56, Fay also discloses in figure 3, a plate 10 area between the knuckles 11 and openings 16. The plate area 10 is integral with the plate. The struts support the panel and allow for connection to other panels. Additionally, these struts are offset from, parallel to and allow for rotation about an axis between vertices.

Regarding claim 43, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (fed. Cir. 1985). Consequently, the method of making the panels is irrelevant, and claim 43 as best understood, is considered to only claim an inventory of panels.

Regarding claim 46, figures 1-3, 6, 7, and 9 disclose symmetrical panels with at least a pair of sides being parallel or all sides being of equal length.

Regarding claim 47, the panels of Fay occur in a plurality of sizes and proportions.

Regarding claim 48, and claims 49 and 50 as best understood, the complex polyhedra as disclosed by Fay includes the listed structures of claim 48, 49, and 50.

Regarding claim 51 as best understood, the complex polyhedra of Fay occur in a plurality of sizes.

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Regarding claim 52 as best understood, the panels of Fay are joined along their sides about a common axis, the axis being parallel, equidistant and symmetrically aligned between the sides of at least two panels being joined.

Claim 43, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Lalvani.

Lalvani discloses in figure 1 ten polygonal members, each being formed as a solid panel.

Because Fay and Lalvani both disclose the structural limitations of the claims as explained above, they are both inherently capable of performing the same functions as, or of being used in the same manner as, the claimed invention

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fay.

Regarding claims 44 and 45, Fay's disclosure is discussed above. However, Fay does not specifically disclose making panels where none of the sides have the same length and at the same time providing panels in a plurality of sizes.

It would have been an obvious matter of design choice to modify the panels of Fay so that none of the sides have the same length and at the same time provide

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panels in a plurality of sizes, since applicant has not disclosed that doing so solves any stated problem or is for any particular purpose.

One of ordinary skill would have made such modifications so that the panels could be used in odd shaped configurations.

Allowable Subject Matter

Claims 59-68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 43-68 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin McDermott, whose telephone number is 703-308-8266.

> Carl D. Friedman Supervisory Patent Examiner

Group 3600

KM 6/4/04